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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,971	11/11/2003	Meng-Che Lee	ACMP0055USA	2970
27765	7590	12/27/2007	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			VIEAUX, GARY C	
P.O. BOX 506			ART UNIT	PAPER NUMBER
MERRIFIELD, VA 22116			2622	
			NOTIFICATION DATE	DELIVERY MODE
			12/27/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/605,971	LEE ET AL.	
	Examiner	Art Unit	
	Gary C. Vieaux	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a first office action in response to application 10/605,971 filed on November 11, 2003 in which claims 1-11 are presented for examination.

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Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy of Taiwanese patent application number 092100270, filed on January 7, 2003 has been received and made of record.

10

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the analog-to-digital converter of claims 8 and 9 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

15

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

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changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,626,543 to Derryberry in view of Examiner's Official Notice (employing Applicants' Admitted Prior Art, hereinafter "AAPA" as supporting documentation).

Regarding claim 1, Derryberry teaches a display device for displaying images, the display device (fig. 9, projector 44) comprising a housing (fig. 9, indicator 12; col. 5, lines 8-9) that including a projector (figs. 1 and 9; col. 3, lines 13-24; col. 4, lines 17-16), as well as teaching USB communication ports to allow for connectivity of devices such as video camera, video cassette recorders, etc. (fig. 9; col. 3, lines 50-56; col. 5, lines

21-27). Derryberry does not explicitly teach the details of the claimed data converter, image processor or image generator.

Nevertheless, Official Notice is taken regarding the state of the art regarding the components and internal processing of a projector at the time of the invention (please also see '543 – col. 3, line 13 - col. 4, line 8, and AAPA – ¶0005-0008). More specifically, in Applicants' Description of the Prior Art, Applicants provide a teaching of the state of the art at the time of the invention, including teaching a housing electrically connecting to an electronic device to receive serial data from an external signal source (fig. 1, housing 12; ¶0005, line 3-6), a data converter installed in the housing and electrically connected to an external signal source, the data converter for converting the serial data to image data (fig. 1, A/D converter 14; ¶0005, lines 3-9), an image processor installed in the housing and electrically connected to the data converter, the image processor for converting the image data to display data (fig. 1, driver 20; ¶0005, lines 9-14) and an image generator installed in the housing and electrically connected to the image processor, the image generator for displaying an image on a screen according to the display data fig. 1, driver 20; ¶0005, lines 9-16). The Description of the Prior Art also provides acknowledgement of the numerous digital image storage devices available and connectable via a USB port (¶0007) to a computer connected to the display device (¶0007-¶0008). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the known analog-to-digital conversion techniques, image processing, image generation, and other well-known operational hardware and software features within the display device taught by Derryberry in order

to create a singular piece of equipment that would provide a more efficient way to prepare and present information, as well as to transport the equipment, without the physical and technical difficulties generally encounter when dealing with multiple pieces of equipment ('543 - col. 1, line 35 - col. 2, line 15; AAPA - ¶0004-¶0008).

5 Regarding claim 2, Derryberry, in view of Examiner's Official Notice, teaches all of the limitations of claim 2 (please see the 103(a) rejection to claim 1 supra) including providing a teaching of a display device wherein the USB port is adapted to connecting to a digital camera through an USB cable ('543 – fig. 9; col. 3, lines 50-56; col. 5, lines 21-27; AAPA – ¶0007).

10 Regarding claim 3, Derryberry, in view of Examiner's Official Notice, teaches all of the limitations of claim 3 (please see the 103(a) rejection to claim 1 supra) including providing a teaching of a display device wherein the USB port is adapted to connecting to a digital camcorder through an USB cable ('543 – fig. 9; col. 3, lines 50-56; col. 5, lines 21-27; AAPA – ¶0007).

15 Regarding claim 4, Derryberry, in view of Examiner's Official Notice, teaches all of the limitations of claim 4 (please see the 103(a) rejection to claim 1 supra) including providing a teaching of a display device wherein the USB port is adapted to connecting to a memory card reader through an USB cable ('543 – fig. 9; col. 3, lines 50-56; col. 5, lines 21-27; AAPA – ¶0007).

20 Regarding claim 5, Derryberry, in view of Examiner's Official Notice, teaches all of the limitations of claim 5 (please see the 103(a) rejection to claim 1 supra) including

providing a teaching of a display device wherein the image processor is capable of converting the image data to display data having an RGB888 format (AAPA – ¶0005).

5 Regarding claim 6, Derryberry, in view of Examiner's Official Notice, teaches all of the limitations of claim 6 (please see the 103(a) rejection to claim 1 supra) including providing a teaching of a display device wherein the image processor is capable of converting the image data to display data having an YUV422 format (AAPA – ¶0005).

10 Regarding claim 7, Derryberry, in view of Examiner's Official Notice, teaches all of the limitations of claim 7 (please see the 103(a) rejection to claim 1 supra) including providing a teaching of a display device wherein the image generator comprises a scaler electrically connected to the image processor to receive the display data, the scaler for scaling the display data , and a driver electrically connected to the scaler for generating a driving signal after the scaler has scaled the display data, so as to display the scaled display data on the screen (AAPA – ¶0005; '543 – col. 3, line 13 - col. 4, line 8).

15 Regarding claim 8, Derryberry, in view of Examiner's Official Notice, teaches all of the limitations of claim 8 (please see the 103(a) rejection to claim 7 supra) including providing a teaching of a display device wherein the image generator further comprises an analog-to-digital converter connected between an external signal source and the scaler, the analog-to-digital converter for converting analog image data inputted from
20 the external signal source to the display data, so as to transmit the display data to the scaler (AAPA – ¶0005-¶0008; '543 – col. 3, line 13 - col. 4, line 8; col. 5, lines 21-27).

5 Regarding claim 10, Derryberry, in view of Examiner's Official Notice, teaches all of the limitations of claim 10 (please see the 103(a) rejection to claim 1 supra) including providing a teaching of a display device being a projector, the projector further comprising a light source for providing light, so as to project the scaled display data on the screen (AAPA – ¶0005).

15 **Conclusion**

Nam (U.S. Patent No. 6,275,375) discloses a monitor with USB connectivity.

Merril (U.S. Patent Publication No. 2002/0036694) discloses a combination projector/display/computer.

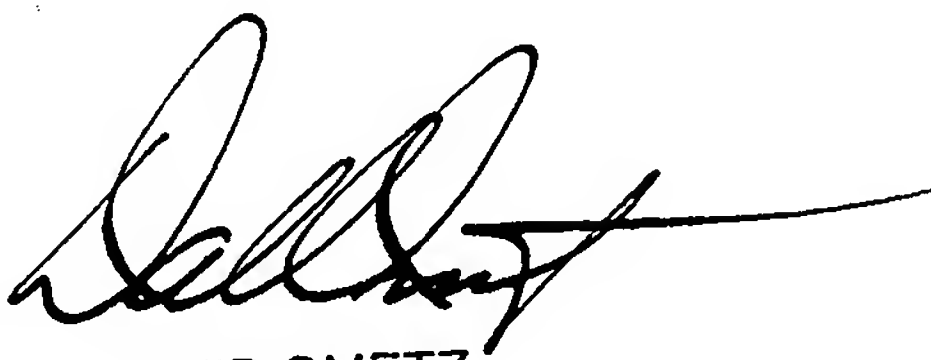
Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary C. Vieaux whose telephone number is 703-272-7318. The examiner can normally be reached on IFW.

5 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on 571-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for
10 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a
15 USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gcv2


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